What is claimed is:

- 1. An end face polishing device, comprising a pressing unit pressing an end face of a fixed bar member to a polishing sheet and a driving unit driving the polishing sheet in roulette shape moving while rotating on circumference parallel to the end face of the bar member.
- 2. An end face polishing device, having a rotating shaft eccentric from revolution center of a first revolution shaft in the revolution shaft, a second revolution shaft eccentric from the rotation center of the rotation shaft in the rotation shaft, and a polishing disc connected to the second revolution shaft.
- 3. An end face polishing device according to Claim 2, wherein the second revolution shaft has an internal gear fixed at a frame of the end face polishing device, a first transfer gear engaging with the internal gear, a rotation shaft having a second transfer gear at opposite end portion of the end portion of the first transfer gear, and an external gear engaging with the second transfer gear.
- 4. An end face polishing device according to Claim 3, wherein the first revolution shaft is connected to a motor through a timing belt.
- 5. An end face polishing device according to Claim 4, wherein the rotation shaft is connected to the motor through another timing belt.

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- 6. An end face polishing device according to Claim 2, having an ultrasonic actuator contacting an external circumference portion of the first revolution shaft and rotating the rotation shaft.
- 7. A method for polishing an end face comprising steps of pressing an end face of a fixed bar member to a polishing sheet and driving the polishing sheet in roulette shape moving while rotating on circumference parallel to the end face of the bar member.
- 8. A method for polishing an end face according to Claim
 7.

wherein the roulette is/cycloid.

9. A method for polishing an end face according to Claim

wherein the roulette is internal cycloid.

10. A method for polishing an end face according to Claim

wherein the roulette is external cycloid.

11. A method for polishing an end face according to Claim

wherein the roulette is relative trocoid inscribed to a first circle and drawn by a point fixed at a second circle smaller in diameter than the first circle.

12. A method for polishing an end face according to Claim

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wherein the roulette is relative internal trocoid inscribed to a first circle and drawn by a point fixed in the second circle smaller in diameter than the first circle.

13. A method for polishing an end face according to Claim 7,

wherein the roulette is relative external trocoid inscribed to a first circle and drawn by a point fixed out of the second circle smaller in diameter than the first circle.

14. A method for polishing an end face, wherein the driving is performed by a XY table.

15. A method for polishing an end face according to Claim

wherein the driving speed is variable.